ANALYTICA CHIMICA ACTA

An international journal devoted to all branches of analytical chemistry

(Full texts are incorporated in CJELSEVIER, a file in the Chemical Journals Online database available on STN International; Abstracted, indexed in: Aluminium Abstracts; Anal. Abstr.; Biol. Abstr.; BIOSIS; Chem. Abstr.; Curr. Contents Phys. Chem. Earth Sci.; Engineered Materials Abstracts; Excerpta Medica; Index Med.; Life Sci.; Mass Spectrum. Bull.; Material Business Alerts; Metals Abstracts; Sci. Citation Index)

VOL. 385 NOS. 1-3	CONTENTS	April 5, 19	99
The Seventh European Conference on	Electro Analysis, Combra, Portugal, 24–28 May 1998		
Foreword			1
Biosensors			
Potentiometric biosensor for L-ascorbi ethylene-vinylacetate membrane	ic acid based on ascorbate oxidase of natural source im	nmobilized on	
	oinas, Brazil) and G. de O. Neto (Bragança Paulista, Braz for the determination of cholinesterase inhibitors	zil)	3
	ussia), E.V. Gogol (Kazan, Russia and Perpignan, France		
	H.C. Budnikov (Kazan, Russia)		13
	icroflow – influences of fluid composition and preliminar and P. Vadgama (Salford, UK)		23
	gonucleotide interactions: novel routes for Tay-Sachs bi		23
	erusalem, Israel)		33
	stitution of the apo-enzyme: tailoring of novel glucose bio		55
	Willner (Jerusalem, Israel) and A.F. Bückmann (Braunso		45
	e for the analysis of organophosphorus pesticides and o		
	nmartino and M. Tomassetti (Rome, Italy)		59
Micromachined biosensor terminals for			
			73
Chemically modified electrodes			
	sing a silica modified carbon paste electrode		
	ere (Villers-les-Nancy, France)		79
Sorption and determination of Hg(II) on			
P. Kula, Z. Navrátilová (Ostrava, Czed	ch Republic), P. Kulová and M. Kotoucek (Olomouc, Czed	ch Republic)	91
Voltammetric response of a copper (II) of	complex incorporated in silica-modified carbon-paste el	lectrode	
C.A. Borgo, R.T. Ferrari, L.M.S. Colpin	ii, C.M.M. Costa, M.L. Baesso and A.C. Bento (Maringá-P	R, Brazil)	03

(Continued overleaf)



http://chemweb.com/gateways/elsevier.html



ContentsDirect, the *free* e-mail alerting service, delivers the table of contents for this journal directly to your PC, prior to publication. The quickest way to register for Contents Direct is via the Internet at: http://www.elsevier.nl/locate/ContentsDirect.

If you don't have access to the Internet you can register for this service by sending an e-mail message to cdsubs@elsevier.co.uk – specifying the title of the publication you wish to register for.

PFeW ₁₁ -doped polymer film modified electrodes and their electrocatalytic activity for H_2O_2 reduction	
S. Gaspar, L. Muresan, A. Patrut and I.C. Popescu (Cluj-Napoca, Romania)	11
Poly(methylene blue) modified electrode sensor for haemoglobin	
C.M.A. Brett (Coimbra, Portugal), G. Inzelt and V. Kertesz (Budapest 112, Hungary)	119
Ion selective electrodes	
Influence of lipophilic anionic compounds on the selectivity of ion-selective electrodes based on podands with	
phosphoryl complexing groups	
O.M. Petrukhin, Y.V. Frakiisky, A.B. Kharitonov, Y.I. Urusov (Moscow, Russia) and	40
V.Y. Baulin (Chernogolovka, Russia)	12
Chemical sensor array for multicomponent analysis of biological liquids	
A. Legin, A. Smirnova, A. Rudnitskaya, L. Lvova, E. Suglobova and	
Y. Vlasov (St. Petersburg, Russian federation)	13
New potentiometric gas-gap sensor	
O.V. Yagodina and E.B. Nikolskaya (St. Petersburg, Russian Federation)	137
Copper potentiometric sensors based on copper complexes containing thiohydrazone and thiosemicarbazone ligands	
M. Jesús Gismera, M.A. Mendiola (Madrid, Spain), J.R. Procopio and M.T. Sevilla (Madrid, Spain)	143
Electrodes based on conducting polymers	
Electrochemical sensors with solid polymer electrolytes	
F. Opekar and K. Stulík (Prague 2, Czech Republic)	15
Characterization of a single-piece all-solid-state lithium-selective electrode based on soluble conducting polyaniline	
T. Lindfors, P. Sjöberg, J. Bobacka, A. Lewenstam and A. Ivaska (Turku-Åbo, Finland)	163
An electrochemical quartz crystal microbalance study on growth of and ion transport in electrochemically polymerized	100
poly(paraphenylene vinylene)	
P. Damlin, C. Kvarnström and A. Ivaska (Turku, Finland)	175
Detection of uric acid with a new type of conducting polymer-based enzymatic sensor by bipotentiostatic technique	1/3
	407
R. Dobay, G. Harsányi (Budapest, Hungary) and C. Visy (Szeged, Hungary)	187
Plasticizer-free all-solid-state potassium-selective electrode based on poly(3-octylthiophene) and valinomycin	400
J. Bobacka, A. Ivaska and A. Lewenstam (Turku, Finland)	195
Electropolymerization of pyrrole and phenylenediamine over an organic conducting salt based amperometric sensor	
of increased selectivity for glucose determination	
J.C. Vidal, S. Méndez and J.R. Castillo (Zaragoza, Spain)	203
In situ preparation of a cholesterol biosensor: entrapment of cholesterol oxidase in an overoxidized polypyrrole film	
electrodeposited in a flow system. Determination of total cholesterol in serum	
J.C. Vidal, E. García and J.R. Castillo (Zaragoza, Spain)	213
Electroanalysis with microelectrodes	
Scanning electrochemical microscopy: beyond the solid/liquid interface	
A.L. Barker, M. Gonsalves, J.V. Macpherson, C.J. Slevin and P.R. Unwin (Coventry, UK)	223
Analytical performance of cylindrical carbon fiber microelectrodes in low-permitivity organic solvents: determination of	
vanillin in ethyl acetate	
L. Agüí, J.E. López-Guzmán, A. González-Cortés, P. Yáñez-Sedeño and J.M. Pingarrón (Madrid, Spain)	241
Development of Hg-electroplated-iridium based microelectrode arrays for heavy metal traces analysis	
P.R.M. Silva, M.A. El Khakani, M. Chaker (Québec, Canada), G.Y. Champagne (Québec, Canada),	
J. Chevalet (Paris, France), L. Gastonguay, R. Lacasse and M. Ladouceur (Québec, Canada)	249
Microelectrode arrays: application in batch-injection analysis	
D.A. Fungaro (Coimbra, Portugal and São Paulo, Brazil) and C.M.A. Brett (Coimbra, Portugal)	257
Distribution (Company) of tagain and out of auto, Diazzi, and office (Company) of tagain, the tagain of tagain, the tagain and out of auto, Diazzi, and office (Company) of tagain, the tagain of tagain of tagain of tagain of tagain of tagain of tagain, the tagain of ta	20,
Voltammetry	
Determination of trace amounts of copper(II) by adsorptive stripping voltammetry of its complex with pyrogallol red	
A. Safavi and E. Shams (Shiraz, Iran)	265
Anodic stripping voltammetry of lead and cadmium using a mercury film electrode and thiocyanate	200
E. Fischer and C.M.G. van den Berg (Liverpool, UK)	273
Synergetic effects in the flow injection analysis determination of catechol in the presence of excess ascorbic acid by	213
series dual-band amperometric detection	
H.B. Mark, Jr., H. Zhang, S.K. Lunsford, O. Ceylan, A.I. Khaskelis, S. Hausner, J.F. Rubinson, G.C. Russell, H. Zimmer and	
G.P. Kreishman (Cincinnati, USA)	281
Voltammetric studies of anthraquinone dyes adsorbed at a hanging mercury drop electrode using fast pulse techniques	
P.J. Almeida, J.A. Rodrigues, A.A. Barros (Porto, Portugal) and A.G. Fogg (Leicestershire, UK)	287
Characterisation of zinc metallothioneins by electroanalytical techniques	
M. Dabrio and A.R. Rodríguez (Geel, Belgium).	295
Development of voltammetric sensors for the determination of sodium dithionite and indanthrene/indigo dyes	
in alkaline solutions	
F. Govaert, E. Temmerman (Gent, Belgium) and P. Kiekens (Zwijnaarde, Belgium)	307
Voltammetry of compounds confined at the hanging mercury drop electrode surface	
A.A. Barros, J.A. Rodrigues, P.J. Almeida, P.G. Rodrigues (Porto, Portugal) and A.G. Fogg (Leicestershire UK)	315

Determination of sub-nanomolar concentrations of lead by anodic-stripping voltammetry at the sliver electrode	
E. Kirowa-Eisner, M. Brand and D. Tzur (Tel-Aviv, Israel)	325
Voltammetric study of the interaction between Se(IV) and dissolved organic matter in environmental aqueous matrices	
T. Ferri and P. Sangiorgio (Rome, Italy)	337
Electrochemical oxidation of NADH at a bare glassy carbon electrode in different supporting electrolytes	
E. Katekawa, F. Maximiano, L.L. Rodrigues, M. Flávia Delbem and S.H.P. Serrano (São Paulo, Brazil)	345
Zinc-binding properties of the C-terminal hexapeptide Lys-Cys-Thr-Cys-Cys-Ala from mouse metallothionein:	
analysis by differential pulse polarography and multivariate curve resolution	
M.S. Díaz-Cruz, J. Mendieta, A. Monjonell, R. Tauler and M. Esteban (Barcelona, Spain)	353
	330
Effect of the medium composition on the current of steady state voltammograms of neutral and charged species in	
dimethylformamide/toluene mixtures	
M.F. Bento, M.D. Geraldo and M.I. Montenegro (Braga Codex, Portugal)	365
A novel method for the determination of vitamin C in natural orange juices by electrochemical monitoring of	
dediazoniation of 3-methylbenzenediazonium tetrafluoroborate	
C. Bravo-Díaz and E. González-Romero (Vigo, Spain)	373
Determination of the vinylsulphone azo dye, remazol brilliant orange 3R, by cathodic stripping voltammetry	
M.V.B. Zanoni, P.A. Carneiro, M. Furlan, E.S. Duarte, C.C.I. Guaratini (Araraquara-SP, Brazil) and	
A.G. Fogg (Leicestershire, UK)	385
Adsorptive cathodic stripping voltammetric determination of gold(III) in the presence of yeast mannan	
B. Lack, J. Duncan and T. Nyokong (Grahamstown, South Africa)	393
Electrochemical oxidation of mitoxantrone at a glassy carbon electrode	-
A.M.O. Brett (Coimbra, Portugal), T.R.A. Macedo, D. Raimundo, M.H. Marques (Coimbra, Portugal) and	
S.H.P. Serrano (Paulo, Brazil)	401
S.F.F. Seriano (Faulo, Brazil)	401
Electrophoropic	
Electrophoresis	
Application of microband array electrodes for end-column electrochemical detection in capillary electrophoresis	400
FM. Matysik, F. Björefors and L. Nyholm (Uppsala, Sweden)	409
Potentiometric detection in capillary electrophoresis with a conducting oligomer electrode	
I. Poels and L.J. Nagels (Antwerpen, Belgium)	417
Misellaneous	
Measurement and control of hydrogen peroxide concentration in alkaline solution by means of amperometric sensor system	
P. Westbroek, E. Temmerman (Ghent, Belgium) and P. Kiekens (Ghent, Belgium)	423
Stripping analysis into the 21st century: faster, smaller, cheaper, simpler and better	
J. Wang, B. Tian, J. Wang, J. Lu, C. Olsen, C. Yarnitzky (Las Cruces, USA), K. Olsen, D. Hammerstrom and	
W. Bennett (Richland, USA)	429
Flow-injection analysis of Kjeldahl nitrogen in milk and dairy products by potentiometric detection	
J.F.C.C. Lima, C. Delerue-Matos and M. Carmo Vaz (Porto, Portugal)	437
Study of the acid-base properties of three fulvic acids extracted from different horizons of a soil	101
S. Fiol, R. López, A. Ramos, J.M. Antelo and F. Arce (Santiago, Spain)	443
Disposable strip potentiometric electrodes with solvent-polymeric ion-selective membranes fabricated using	440
screen-printing technology	454
R. Koncki, S. Głąb, J. Dziwulska (Warsaw, Poland), I. Palchetti and M. Mascini (Firenze, Italy)	451
Multi-enzymatic electrochemical sensor: field measurements and their optimisation	
N.F. Starodub, N.I. Kanjuk (Kiev-30, Ukraine), A.L. Kukla and Y.M. Shirshov (Kiev-28, Ukraine)	461
Interaction of pyrite pulps with Ag ⁺ and Hg ²⁺ ions. Electrochemical characterization of micrometric grains	
M. Perdicakis, N. Grosselin and J. Bessière (Villers-lès-Nancy, France)	467
Author Index	487
Calendar of forthcoming meetings	i

